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ORGANIZATION OF AN ACCOUNTING DEPARTMENT

By HENRY M. EDWARDS

MODERN BUSINESS
LECTURE No. 9

ALEXANDER HAMILTON INSTITUTE
NEW YORK

Organization of An Accounting Department

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One of a series of Modern Business Lectures
Especially Prepared for the
Alexander Hamilton Institute

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NEW YORK

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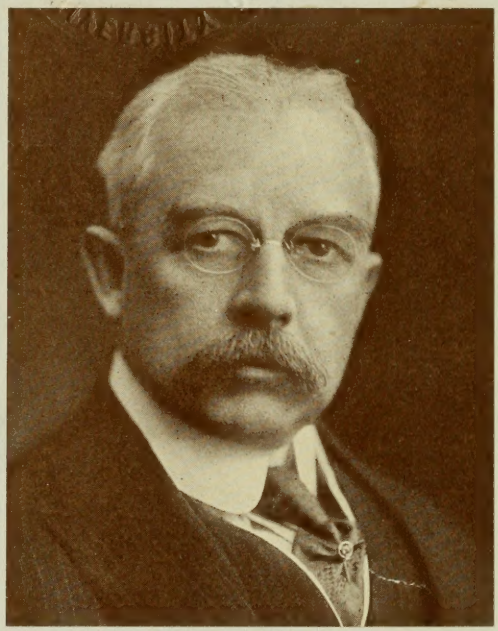

HENRY M. EDWARDS

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Born in New York City, educated in the New York City Public Schools and College of the City of New York. After a short experience in wholesale drygoods and in the fire insurance business, Mr. Edwards entered the employ of John Anderson & Company, Tobacco Manufacturers, where he was connected successively with the office, manufacturing, and selling organizations. He entered the employ of the Manhattan Electric Light Company in 1889 as bookkeeper; was subsequently appointed Auditor of the company, and two years later was made Director and Secretary, which office he retained until the company, in 1900, was consolidated with the Edison Electric Illuminating Company. In the latter company Mr. Edwards was in charge of the financial operations incident to the consolidation of all the companies forming the present New York Edison Company, of which company he was made Auditor. This position he still holds.

In 1907 Mr. Edwards was made Chairman of the Accounting Committee of the National Electric Light Association, out of which committee work grew the present Accounting Section—one of the three great centers of the National Electric Light Association's activities. This Accounting section was organized under his administration, and he has always been active in its affairs. The Section includes in its membership over one thousand electric light accountants, representing companies in the entire continent of North America.

Mr. Edwards is author of a book entitled "Electric Light Accounts and Their Significance." He has contributed to trade journals and other magazines many papers on accounting and financial subjects and has delivered many addresses on these subjects at the Association meetings.

NOTE:—This Lecture, which is based upon the author's ripe experience in his special field, should be read in the light of the Modern Business Text, and should be studied as an authoritative message from the field of present-day business activity.

Organization of an Accounting Department

By

HENRY M. EDWARDS

When considering the elements entering into the organization of an efficient, well equipped Accounting Department, one inevitably considers the subject from the corporation standpoint. The accounting needs of firms and partnerships are usually met when the desires of those interested in the business are satisfied. If all business enterprises were conducted in such form, however, it is doubtful whether accounting as a science would have reached its present plane of importance, and it is more than likely that instruction in the art of bookkeeping would have been confined to the exposition of the theory of double entry and the uses of ledgers, daybooks, cash books, and journals.

The advent of the corporation has changed all this. A corporation is an efficient legal device for bringing together, for a common purpose, the resources of an unlimited number of persons. The right to be a corporation is conferred by the State, and the State laws under which men may become associated as a corporation, generally exert an influence on the accounting structure. Men thus associated rarely personally

conduct the business, but appoint or elect certain of their number to do their business for them, these men acting as the agents of the associates, or more popularly, directors of the corporation. The fact that such directors are managing the affairs of others tends in itself to create a sense of accountability.

The directors are required at intervals to give an account of their stewardship, and the records of the corporation must therefore be such as to show with exactness everything that is being and that has been done and must, moreover, be so kept that an investigation will disclose every change that has occurred in the affairs of the corporation.

A Record of Events

Since accounts constitute the history of an enterprise, the Accounting Department is depended upon to produce the evidence establishing the accuracy and integrity of every transaction. The Accounting Department, to use a figure of speech, is not a well, but a storage tank; it originates nothing and can produce only what has previously been deposited in it. Its records are simply summaries of individual items, many of which may have originated a long distance away from the place where the Accounting Department is housed.

An employe's daily time card or a requisiton on the storeroom for a pound of nails is an essential part of the accounting propaganda—just as much so as if the transaction occurred in the innermost shrine where the general ledger is kept.

The entire corporation and every person connected with it are doing the work and making the records which underlie the accounting structure. A stream can rise no higher than its source, and the reports of the Accounting Department as to all the vital matters upon which it is required to furnish information can by no possibility be better or more accurate than the basic data upon which its elaborate structure is erected.

The accounting organization should therefore include within its scope all the records of the corporation, both financial and statistical, whether such records are prepared in the Accounting Department or outside thereof; and the entire record-making machinery should necessarily be designed by and be operated under the supervision of the Accounting Department authorities to the end that the history of each transaction may consist of an unbroken narrative, beginning with the time and place of its origin and ending with its completion and with the final resting place of such history in the permanent archives of the corporation.

Opposite Tendencies

The foregoing are truths that should be thoroly established in the minds of the men both in the office and in the field. Too often the accountant is in danger of regarding the business as tho it were created for the purpose of furnishing data for his records. He is tempted to criticise all actions and methods that do not of themselves fall directly into the little niches

previously designed for their occupancy, and to look askance at operations for which no accounting provision has already been made.

The man in the field, on the other hand, is likely to err in another direction. He probably has a totally different conception of the objects and purposes of the business. To his mind the accomplishment of physical objects—or, if he happens to be on the selling side, the marketing of the product—is the great desideratum. He regards accounting records and data as being at most incidental, and believes that while the business would continue to run with a fair degree of prosperity even if no accounting was attempted, matters would speedily be brought to an end if his part of the work was to be interrupted.

The views of both these men are the natural outcome of their occupations. No one can dispute the validity of the argument advanced by the man in the field. Obviously, if nothing was made and nothing was sold, the most perfectly organized accounting department could not produce a successful business. Like many similar arguments, however, the view of the man in the field seldom represents the whole truth. Human endeavor is guided by the application of knowledge and experience formerly acquired. Man has learned the value of storing his knowledge so that it shall be immediately available whenever required.

The Value of Records

It is right at this point that the accountant comes in. The surface of a city street has a uniform ap-

pearance and gives no indication of the labyrinth of pipes, ducts, sewers, and municipal equipment that exists under the surface. But while all these structures may have been laid with the maximum of efficiency and economy, unless accurate, durable and readily accessible records have been kept showing in sufficient detail size, location, cost, etc., of each pipe, duct and so forth, it is conceivable that the work of the municipality might, if not stop altogether, at least be seriously hampered.

The man in the field frequently works under adverse physical conditions. Extremes of heat and cold, dirt, noise, unattractive surroundings, poor ventilation, often fall to his lot. His whole thought and energy are concentrated on the accomplishment of a physical task, involving the use of masses of material and the direction and control of widely different types of persons. It is not to be wondered at if, after a hard day's work, he gets somewhat impatient when he is required to spend an hour or so filling out forms and making records of his performance for the information of people who may be miles away, whom he possibly has never seen and whom more than likely he has no desire to know—such records to be used for purposes the importance of which he does not comprehend and the results of which are perhaps never brought to his attention. Yet if these forms are not accurately prepared; if they fail to state in detail the material used, the number of men engaged and the time consumed in the work, the results of such inaccuracy may be felt for years to come. What did you

do?—How long were you at it?—What material did you employ in doing it?—are some of the questions which the office levels at the man in the field; and the character of the answers to these questions, couched in plain language on forms of simple design, determines to a great extent the integrity and value of the entire accounting structure.

Sympathetic Insight

It is essential that there be a full and sympathetic understanding between those inside the office and those on the outside. At the very start the accountant should adopt and maintain the principle that the books must be made to fit the business, and not the business to fit the books. He should be able to visualize the work which he is recording and should have sufficient knowledge of the practical side of affairs to enable him to detect any errors in the reports. Perhaps above all he needs to have a sympathetic appreciation of the difficulties to be surmounted by the men in the field, to conduct his office in such a manner that it will be a help and inspiration to others. He must not allow the idea to prevail that his function is solely that of a watch dog and he should not harass and annoy with ill-timed inquiries and captious criticisms those who, after all, are carrying on the actual business affairs of the corporation.

The man in the field should be given instruction regarding the preparation of his reports and the part they play in the corporate records. He should have a very clear idea of the purpose served by his report,

what is done with it, and its place in the permanent financial records. He should have a definite conception of the fundamental difference existing between capital and the use and employment of capital to the end that maintenance items shall not be charged to construction and vice versa. On the other hand, it is not necessary that the field worker should know anything of the mechanism of the accounting procedure. He need not know, for example, how journal entries are prepared, nor is it at all required that he understand the philosophy underlying suspense accounts and income and balance sheet exhibits. He should know something, however, of the filing system employed in the general office and he should at least know the name of the employe who receives and acts upon the data submitted.

The requirements which a modern accounting organization is expected to meet are epitomized in the following quotation from an article in "Encyclopedia of Accounting":

> "The system of accounts is devised for the purpose of recording such facts as may enable the producer to test with the maximum of accuracy his various assumptions, and to modify them wherever experience dictates. The accountant is, therefore, as it were, the specialized eye-piece thru which the producer sees how the value of his products is reflected back in detail all along the lines of production that diverge from the finished goods back toward cost of raw material, price of labor, rent of land and buildings, interest on capital, and all the other items which are factors in price.

Since this is a rather large order, it is important that the accounting equipment in order to be able to

fill it must be modern, including all necessary mechanical aids for the performance of those tasks that would otherwise be drudgery and of which the cost would be prohibitive. Whatever may have been true years ago, in these days the time of human beings cannot be profitably employed in assorting and listing items, adding columns of figures or recording details. Machines do such work not only with greater speed, but with greater accuracy.

A Modern Service Corporation

The mobilization of the entire force of employes in the effort to establish an adequate accounting organization is not as it may seem to some, a fanciful theory, but a practical and fully tested working plan. The detailed methods followed in this respect necessarily vary in different lines of business. In the belief, however, that the reader will profit by a recital of the ways and means employed in a large modern corporation where the ideas herein advocated have been employed for a number of years, the author ventures to take a leaf out of his own experience as an illustration of the adaptation of the principle involved.

The business referred to has to do with the generation and distribution of electric current to the inhabitants of the largest city in the United States. The area of direct supply covers a distance of more than 25 miles from its southern to its northern extremity, and within that area are contained several huge power houses, various distributing stations, a vast network of underground and overhead conductors, over

200,000 customers and 250,000 meters. The rapid growth of the business has necessitated during a period of 25 years several complete changes in the methods of generation and transmission, involving the introduction of new types of apparatus and the reinvestment of great sums of money. About 6,000 employes are now scattered over the entire territory and include every kind of trade and occupation known to modern industry. Here, it may be said, are all the elements that constitute an intricate and difficult accounting problem—a problem demanding for its correct solution the united efforts of all those engaged in the business.

A System of Symbols

As a first step in the desired direction the company adopted and disseminated a system of accounts in which ample provision was made for recording all the essential facts of the business, arranged in such order as would enable each employe to identify the place which he occupied in the accounting scheme. This system of accounts was distributed in the form of a chart (see insert), the chart showing not only the principal accounts, but also the various kinds of transactions which should be charged thereto. To facilitate the use of these accounts and to avoid the repetition of names—many of which are long and require much time and space for their expression—there was devised a system of numerical symbols, permitting the substituting of one or two simple characters for a long name or designation.

The system of symbols adopted is a Decimal System. One of its great advantages is that it possesses extreme flexibility. The numbers assigned range from "0" to "9" inclusive. Of these the first number represents a grand or major division. Thus in the chart referred to the numeral 0 represents "General Expense"; 1 represents "General Technical Expense"; 2 and 3 stand for "Expense of Production of Current in the Power House"; 4 and 5 for "Distribution of the current from the power house to consumers' premises"; 6 and 7—"Fixed Capital or Construction Accounts"; 8 and 9—"General Ledger Accounts." The second number in the symbol represents a subdivision of the main division, and the third number an analysis of this sub-division of the main division.

As will be seen, the Decimal System is capable of symbolizing transactions to a very minute degree. The blank spaces on the chart indicate that even a business so greatly diversified as the one herein described, has not found it necessary to use all the numbers which the Decimal System provides. Employes have no difficulty in familiarizing themselves with the numerical symbols, especially since, outside of the accounting department itself, employes are chiefly interested only in their own field numbers.

Sub-Analysis of Accounts

Of course, the decimal system of accounting symbols is capable of much greater expansion than is required by the ordinary accounting department records. These records analyze costs by main operating

divisions, but the chief engineer, for instance, who is responsible for the safe and economical operation of the power house, needs much more detailed information than the accounting department can profitably furnish. To meet the needs of the chief engineer in this respect, accounts shown on the chart have been sub-divided, the amounts represented by the different sub-divisions being determined by field clerks in the chief engineer's office. Several examples of this working sub-analysis are given in the following pages because they not only illustrate the extreme flexibility of the system, but they also afford an interesting example of the length to which it has been found necessary to go in order that the accounts may reflect every phase of the fluctuations in the affairs of the business.

A glance at the chart shows in the square numbered 28 under "Production Supplies" certain items grouped together indicating the nature of such supplies. In the sub-division of that account, as here shown, each of the individual items making up that group is shown in connection with its specific number, making it possible without unduly burdening the general accounting system, to keep close track of even the smallest items. For obviously, it is entirely feasible to subdivide each of these numbers by the use of additional decimals. This is shown in the sub-division of Account 32 (compare with chart).

ACCOUNT 28

PRODUCTION SUPPLIES

281 Packing, all kinds.
282 Waste and waste ends, towels and soap powder.
283 Boiler gaskets, gauge glasses and washers.
284 Dynamo and motor brushes (does not include M. G. brushes).
285 Boiler tools, such as fire hose, ash hose, shovels, wheelbarrows, chipping hammers, chisels, etc.
286 All other small tools, such as wrenches, files, drills, taps, tap wrenches, nipple holders, chisels, locks, etc. (except for boiler tools).
287 Hose, such as hose for cleaning purposes, blowing generators and boiler tubes, etc.
288 Miscellaneous, including bolts, nuts, screws and nails for general use.
289 Washington machine and towel barrels.

ACCOUNT 32

321 *Brick Work.* BOILER REPAIRS

3211 *Bridge Wall.*
- 3211 Bridge wall.
- 32111 Bridge wall, stoker boilers.
- 32112 Bridge wall, hand boilers.

3212 *Side Wall.*
- 32121 Side wall, stoker boilers.
- 32122 Side wall, hand boilers.

3213 *Arches.*
- 32131 Arches, stoker boilers.
- 32132 Arches, hand boilers.

3214 *Jambs.*
- 32141 Jambs, stoker boilers.
- 32142 Jambs, hand boilers.

3215 *Miscellaneous Brick Work.*
- 32151 Miscellaneous brick work, stoker boilers.
- 32152 Miscellaneous brick work, hand boilers.

3216 *Unloading and Carrying Brick.*

322 *Grate Bars.*

3221 *Stoker Bars.*
32211 Corrugated bars.
32212 Cauldwell bars.

3222 *Hand Bars.*
32221 Gibson bars.
32222 Neemes bars.
32223 Washburn & Granger.
32224 Treadwell.

323 *Furnaces.*

3231 *Stoker Furnaces.*
32311 Dumping gear, including levers and brackets, rods and grates.
32312 Ash pan (pit) and doors, comb, chambers, doors.
32313 Throat plates, pusher plates and furnace doors, baffle plates and braces, flame plates and braces.
32314 Stoker gear.
32315 Miscellaneous.

3232 *Hand Furnaces.*
32321 Dumping gear, including levers, brackets, rods and grates.
32322 Ash pan (pit) and doors, comb, chambers and doors.
32323 Pusher plates, furnace doors, baffle plates and braces, flame plates and braces.
32324 Side and center bars, combs and comb bars.
32325 Miscellaneous.

324 *Boiler Repairs.*

3241 *Stoker Boilers.*
32411 Water columns, valves, drains, etc.
32412 Test cocks, plug cocks, steam jets, gauges, etc.
32413 Repairing boiler fronts and backs and painting boilers.
32414 Headers.
32415 Drums.
32416 Mud drums and nipples.
32417 Tubes and nipples.
32418 Circulating tubes and nipples.
32419 Miscellaneous boiler repairs.

3242 *Hand Boilers.*
- 32421 Water columns, valves and drains, etc.
- 32422 Test cocks, plug cocks, steam jets and gauges, etc.
- 32423 Repairing boiler fronts and backs and painting boilers.
- 32424 Headers.
- 32425 Drums.
- 32426 Mud drums and nipples.
- 32427 Tubes and nipples.
- 32428 Circulating tubes and nipples.
- 32429 Miscellaneous boiler repairs.

325 *Auto Valves.*
- 3251 Auto valves, stoker boilers, including back and front stop valves, safety valves, etc.
- 3252 Auto valves, hand boilers, including back and front stop valves, safety valves, etc.

326 *Superheaters.*
- 3261 Superheaters, stoker boilers.
- 3262 Superheaters, hand boilers.

329 *Stacks and Flues.*
- 3291 Stacks.
- 3292 Flues.
- 3293 Dampers and regulators.
- 3294 Cinder catcher.

A still finer sub-division of items is found in the following account, illustrating the fact that the system is capable of limitless expansion. As the numbers indicate, only about one-half of this account is here shown:

ACCOUNT 35

REPAIRS—MECHANICAL APPARATUS

351 ***Boiler Apparatus.***

3511 *Coal Handling Apparatus.*
- 35111 Coal conveyor.

351111 *Bucket Conveyor.*

3511111 Digger.
3511112 Trolley and cable (including all cable except used on cable road).
3511113 Tower (including boom and hopper).
3511114 Crusher and belt.
3511115 Tower engines and conveyor motors.
3511116 Links, brackets, buckets, bucket wheels, gear wheels, etc. (includes all line repairs).
3511117 Cable road and cars (includes all cable and parts for coal cars).
3511118 Belt and pulleys.
3511119 Sundries.

351112 *Belt Conveyor.*

3511121 Digger.
3511122 Trolley and cable (includes all cable except used on cable road and counterweight).
3511123 Tower (including boom and hopper).
3511124 Crusher and belt.
3511125 Tower engines and conveyor motors.
3511126 Counterweights and cable.
3511127 Scales.
3511128 Belt and pulleys.
3511129 Sundries.
3511130 Coal chutes and gates.

3512 *Ash Conveyor.*

351211 Ash cars.
351212 Ash locomotive and winches.
351213 Ash motors.
351214 Hopper and chutes.
351215 Belt and pulleys.
351216 Pocket and chutes.
351217 Pulley gear and sprocket wheels (including all line repairs buckets).
351218 Skip hoist (including bucket and cable, etc.)
351219 Sundries (including track).
35122 Ash chutes.

3513 *Forced Air Apparatus.*

35131 *Blower Sets.*

3513111 Keying up.
3513112 Pistons, rods and cylinders.
3513113 Crosshead and pins and connecting rods (including wedge blocks, bolts, etc.).
3513114 Cranks, crank-shafts, crank-pins, crank-pin boxes, main bearings, etc.).
3513115 Valves, valve stems, eccentrics, etc.
3513116 Fans, blades, fan shafts and arms (including balance weights, etc.).
3513117 Oil system (including oil piping—except crank-pin drains—oil and grease cups, etc.).
3513118 Governor and gear.
3513119 General overhauling (miscellaneous).
3513120 Engine driven.

351312 *Turbine Driven.*

3513121 Buckets and wheels.

The Work-Order System

Another step in the direction of securing cooperation among all the employes in behalf of good accounting records, consisted in establishing a work-order system. Under this system are carried on transactions having to do with construction or fixed capital additions, large repair work, or special transactions for which segregated records were desired. Correct accounting necessarily requires that amounts spent for construction shall not be confused with those spent for operation, but that the sharpest line of demarkation shall be maintained between the two. Frequently employes are engaged with transactions that involve both the extension and the operation of the property, and that require the use of the same

kinds of material for both purposes. A pole line gang, for instance, may on the same day extend an existing pole line several blocks—thereby adding to the existing equipment half a dozen or more new poles with cross-arms attached and string thereon additional lengths of copper wire—and may at the same time and under the same foreman take out an old decaying pole and put a new one in its place. Manifestly the first transaction has to do with addition to the property and to the Company's investment, while the second transaction represents maintenance or repairs. The difference between these two transactions is fundamental, and the labor and material associated with each must be clearly differentiated according to existing facts and not guessed at or approximated by the foreman when making his report at the end of the day.

The work-order system provides the accounting machinery necessary to maintain the required division of time and material and their proper assignment to the work for which they were used.

This system provides, among other things, that all construction work and repair work costing over $50 shall first be covered by a requisition prepared by the official under whose control the work is to be done. This requisition states, in general terms, the character of the work to be performed and is accompanied by an estimate of the cost. It is thereupon forwarded to the company's executive or to a construction committee for consideration. If the requisition is approved, it is then forwarded to the accounting official,

who assigns to it a progress number and then issues an order to the official originally making out the requisition to proceed to do the work as described, with instructions to charge all time and material to the assigned work-order number. This official, in turn, instructs his foreman to do the work and to charge all time tickets of men engaged on the work to the auditor's "prog" number, also to endorse with the same number all requisitions on the storeroom for material to be used on that piece of work.

The auditor, when issuing the order to the official, starts a work-order sheet (see form on opposite page), and assembles thereon, as the data come thru, all the time and material reported as used in connection with that number. The official doing the work need not even know to what account the cost will be finally charged, altho the original requisition, when approved, will state that the entire cost, when ascertained, shall be charged to the proper account interested.

When the work has been completed and all the items have been charged to the sheet, the total cost is determined and the amount, which in the meantime is carried under Account 75, "Work in Progress," is transferred by journal entry to the operating or fixed capital account to which it belongs.

Records That Promote Efficiency

By the use of the work-order system, it is therefore seen that the accounts do not contain random charges for labor and material, but only entries

Form 021-28-1—15M-9-13

WORK-ORDER SHEET

CHARGE TO ACCT..... JOB NO.....

LOCATION.....

DESCRIPTION.....

.....

.....

ESTIMATED COST..... APPROPRIATION OF..... BUDGET NO..... AMOUNT OR BALANCE.....

ACTUAL COST..... AUTHORIZED BY..... APPROVED..... COMPLETED.....

LABOR		SUPPLIES		SUNDRIES			MONTHLY
VOUCHER	AMOUNT	SLIP No.	AMOUNT	VOUCHER	FOR	AMOUNT	TOTALS

which show in one item the completed cost of a definite transaction, the accounts being in this respect inventories of property used in the business.

Since the men in the field do not use the accounts for their work, but simply the assigned numbers, they do not have to trouble themselves with distinguishing between transactions that relate to construction and those that belong to operation; all this has been determined in advance. They simply know work-order numbers, and having distributed their items of labor and material accordingly, their responsibility in that respect ceases.

The accounting department having now assembled all the items of expenditure under the proper work-order number, is enabled to compare the actual cost with the estimated cost, thereby providing the management with means for checking the efficiency with which the work has been done. Furthermore, if, as the work progresses, it is found that the actual cost is exceeding the estimated amount, the working official has an opportunity to explain the reasons for the error in the original estimate, and either secure from the executive an additional appropriation or abandon the work, unless it can be accomplished in some other way.

The important point in all this is, that the work-order system secures to the management absolute control over a very important feature of the corporation's activities, assures the proper distribution of the expenditures by the men in the field, and identifies the corporation accounting records with operat-

ing units of apparatus or devices. Thus it will be seen that all employes interested are working on common lines for definite purposes, and the necessary cooperation by all is thus obtained.

Individual work-orders are often more closely analyzed in the working departments than is required for the corporate records. If, for example, a work-order is issued for the erection of a building, the requirements of the corporate records are satisfied when the total cost of that building has been ascertained. The building engineer, however, may want details as to the quantity of brick, cement, etc., used in the work. Unit costs for different features of building construction are highly prized by the engineer in charge of buildings, but for general corporation or accounting department purposes such analyzed data would not be necessary.

Since, however, the engineering analysis would agree in totals with the accounting record of the completed transaction—inasmuch as the accounting department and engineering department records and statistics are both based on the same foundation—the departmental and engineering records are simply finer analyses serving as adjuncts to the general accounting system.

Accuracy Thru Interdependence

Within the Accounting Department itself provision should be made for the interdependence of the different units. Much better results will be obtained if records of completed transactions represent the

composite work of several divisions. The treasury, for instance, should not initiate payments or control the sources of receipts. On the contrary, payments should be made in accordance with vouchers prepared and certified by another main division, and receipts should be accepted on the basis of bills also prepared and rendered by an independent bureau. A system of checks and counter checks is very necessary to insure accuracy, and the work of each position or desk should be so assigned as to require the complementary performance of some other unit in the organization to complete the record. This does not necessarily involve duplication of effort—all depends upon the plan under which the work is divided. A minimum amount of duplication, however, if necessary to secure the results desired, should not be permitted to prevent the adoption of the system.

Right Use of Accounts

In connection with the elements involved in the organization of an accounting department, something may well be said with regard to the character which should attach to the accounts. It has already been stated that the accounts constitute the history of the enterprise, and it should be emphasized that this is their sole function. Accounts should not be kept with the object of demonstrating the correctness of some particular economic theory, influencing the investment market, or accomplishing any other ulterior purpose. Accounts are repositories of facts, and whatever conclusions may be drawn from any exist-

ing state of facts disclosed by the accounts should be arrived at independently.

A good illustration of the misuse of accounts is afforded by an existing controversy over an account prescribed by the Interstate Commerce Commission for Steam Railroads. It frequently happens that a shipper along the line of a railroad, in order to improve his manufacturing facilities, will pay to the railroad the cost of an extension or siding or spur of track leading to his plant. This improvement can be used only for his purposes. The Interstate Commerce Commission classifies such a payment by a shipper to a railroad as a "donation," and instructs the railroad to credit the amount so received from the shipper to "Surplus." The cost of the improvement to the railroad, where the title to the new property remains with the road, is charged to the prescribed property account with the result that the books perfectly reflect the character of the transaction in all its phases.

Certain people who are more especially interested in the economics of the transaction and the latter's effect on rates and property values contend that the payment by the shipper, instead of being credited as a donation to "Surplus," should be credited to the construction account to which the cost of the improvement has been charged, upon the theory that the railroad is entitled in its rates to a return only upon its own investment and not upon values created as the result of payments made to it by the shipper.

But whether or not the theory advanced by the

contestants as to rates or values is the correct one under the conditions described has nothing to do with the procedure to be followed in accounting for the transaction. The method prescribed by the Interstate Commerce Commission establishes the facts, whereas the method advocated by the contestants hides the facts because by its use the cost of construction is understated and the very significant and interesting fact that the railroad has received a donation from a shipper is concealed from view.

If the principle is recognized that the purpose of accounts is to record transactions, and if the records are so constructed as to clearly set forth all the pertinent facts of each transaction, the accounting department will be organized upon a sound and logical basis and its exhibits and statements will receive the credence to which they are justly entitled. They will, moreover, furnish a basis from which economic deductions may be safely drawn.

CLASSIFICATION OF ACCOUNTS

STATION SYMBOLS

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
FIRST AVE 38 & 39TH ST	FIRST AVE 39 & 40TH ST	2187TH STREET 9TH AVE	55-57 DUANE ST / D1 59 DUANE ST	W. 16TH ST	E 12TH ST	W 26TH ST	W 39TH ST	W 53RD ST	VANDAM ST.	E 39TH ST	E 60TH ST	W 64TH ST	WATER ST	CLINTON ST	BOWLING GREEN
S	T 192 W 27TH ST / T1 154 W 27TH ST	U	V	W 211 W 84TH ST / W1 209 W 84TH ST	X	Y	Z	LEX	B. I.	GIMBEL	41ST ST	103 ST	Bx	FORDHAM	RIVERDALE
HORATIO ST		44 W 27TH ST	E 83RD ST		E 121ST ST	W 123RD W 124TH ST	W 107TH ST	148 E 26TH ST	BLACKWELL ISL	GIMBEL BLDG.	W 41ST ST	E 103RD ST	140 ST RIDER AV	189 ST PARK AVE	BLACKSTONE AV.

00-59 OPERATING EXPENSE ACCOUNTS

60-79 FIXED CAPITAL ACCOUNTS

80-99 MISCELL. LEDGER ACCTS

00-19 GENERAL, MISCEL, AND COMMERCIAL EXPENSES

20-39 PRODUCTION EXPENSES — LABOR, SUPPLIES, MISC. — REPAIRS.

40-42 TRANSMISSION EXPENSES
43 ELECTRIC STORAGE EXPENSES
44-49 DISTRIBUTION EXPENSES
50-59 UTILIZATION EXPENSES

"A" ADDITIONS
"B" BETTERMENTS
"C" REPLACEMENTS
"F" WITHDRAWALS - CREDIT

00 SUNDRIES
0 Undistributed - General
1 Rentals
2
3
4 Gen'l Off. Sundry Expenses
5 Janitors Expenses
6
7 Special (Kenny)
8 Bond & Stock Exp.

10 CONTINGENT EXPENSE

20 STATION EXPENSE
1 Lighting, heating Cleaning, Teleph. Toilet Service

30 REPAIRS, SUNDRIES
Furniture

40 SUBWAY RENT
1
2 C.T. & E.S. Co.
3 Bklyn Bridge
4 Miscell.

50 COMMERCIAL
(Arcs-500 W. Twgs)
-1. Arc labor &
+2 " supplies
3 " repairs
4 " surveys
5 500 W. Fixt. install'n
+1 " " removals
-2 " " repairs
-3 " " cleaning
-4 " " reprints

60 SUNDRIES
1 Eqpt. of Officers
2 " " Shops
3 " " store-rooms
4 " " stables
5 " " Lab'ty.
6 Gen'l Tools & Impl.
7 Shadyside (Coal St.)
8 Autos.

70 INTANGIBLE CONSTRUCTION
1 Organization.
2 Franchise
3 Patent rights
4 Other intangible

80 MATERIAL & SUPPLIES
1 Storerooms
2 Stations
3 Stationery
4 Stamped Envel.

90 UNDERLYING & REAL ESTATE MORTGAGES.
1 Ed. Elec. Ill Co. of N.Y. - First Consol Mtge Bonds.
2 N.Y. Gas & E.L.H & P. Co. - First Mtge Bonds
3 First Mtge Bonds Purchase Money
9 Real Estate Mtges

01 OFFICER'S SALARIES & EXPENSES
1 Directors Fees.

11 JOINT OPERATING EXPENSES. Cr

21 SUP'T & CARE
1. Clerks
2. Chemists
3. Messengers
4. Janitors.
5. Watchmen
6. Elevator Men.

31

41 MAINTENANCE & REPAIRS
1 Poles and Fixtures
2
3 Overhead Conduc'ts
4 Underground

51 COMMERCIAL INCAN.
1 Install (A" Incan)
2 Renewals
3 Erosting & Dipping
4 500 W Lamps (Renewals)
" " " (Renewals)

61 ENGINEERING & SUP'T
2 Law expend in const.
3 Injuries " "
4 Taxes " "
5 Interest " "
6 Miscellaneous Construction Exp.

71

81 CURRENT ASSETS
1 Cash, Treasury
2 " , General
3 " , Consum. Dep.
4 " , Petty
5 " , Appr. To Employ
6-1 Bills Rec - Assoc. Cos
6-2 " " - Comml

91 CURRENT LIABILITIES
0 Bills payable
1 Accts "
2 Coupon Int Matured
3
4 Dividends declared
5 Consumers deposits
6 " "
in abeyance
7 Unclaimed wages
8 " dividends
9 Unlocated debtors & cr's

02A ACCOUNTING GEN'L
1 Cashiers, Clerks, Disburs.
2 Bureau of Disburs
3 Payroll Dept.
4 Experts

02C ACCTG COMM'L
1 Indexers
2 Collectors
3
4 Accounting
5 Cashiers, Clerks
6 Stationery, Postage

12

22 BOILER LABOR
1 Fire Room Engrs
2 Water Tenders
3 Firemen
4 Feed Pump Men
5 Boiler Cleaners
6 Coal Passers
7 Ash Handlers

32 REPAIRS, BOILERS
Furnaces
Stoker, Mech.
Smoke Stacks
Flues
Superheaters
Damper Regulators

42 SUB-STATION EXPENSE & REPAIRS
1 Labor
2 Supplies & Expense
3 Repr's to Bldg
4 " " Eqpt
5 Suspense

52 INSPECTION OF CONSUMER'S PREMISES
1 Install'n Inspec'n
2 Large bldg - oversight
3 Surveys
4 Lighting Inspec'n
5 Tests

62 BOILERS

72

82 CURRENT ASSETS
0-1 Accts Rec'ble Comm & Miscel - Manhattan
0-2 Accts Rec'ble Comm & Miscel - Bronx
0-3 Acct's Rec'ble Ed. Light + P. I. Co.
6 Int. & Div. Rec'ble
7-1 Miscel Bills Susp Manhattan
7-2 Miscel Bills Susp. Bronx

92 CURRENT LIABILITIES
0 Bronx Exchange
1 Rent Guaranty Deposits
2 Manhattan Exch'ge
3
4 United E.L. & P. Co.
5 Westchester Ltg Co.
6 Edison Ill. Co. Bklyn
7 Brush Elec Ill'g Co. N.Y.

03 GEN'L SERVICE
1 Controller
2 Purch. Dept
3 Stenographers
4 Hall Boys
5 Janitors
6
7 Mail Clk's (Filing etc)
8 Exec. Sec'ys & Clks.
9 Employment Bureau

13 UNCOLLECTIBLE BILLS

23 ENGINE LABOR
1 Chief & Asst's
2 Engineer
3 Machinists & Help'rs
4 First class oilers
5 Second " "
6 Pumps " "
7 Oil handlers
8 Wipers

33 REPAIRS - STEAM ACCESSORIES
Piping from boilers to engines, feed water piping & tanks, exhaust piping, ash pit drains, oil drains from eng. Air piping

43 ELECTRIC STORAGE
1 Storage battery expense & repairs
1 Labor
2 Supplies & Expenses
3 Renewals
4 Repairs To accessories

53 REPAIRS OF CONSUMERS' INSTAL.
1 Comm'l outrigger Replace fuses, etc.
2 Install. and remove. Tungsten fixtures
3 R & R. "308" signs

63 PIPING

73 PROPERTY
1 Meters
2 Line trans. & devices
3 Arc lamps.
4 Prepay't meters
5 Motors loaned or rented

83 TREAS'Y SEC'TY INVESTMENTS
SPECIAL DEPOSITS
0 Treas. Bonds
4 Bond invest.
5 Ins. Partic. fund.
7 Free Invest.
8-1 Coupon Spec'l Dep.
8-3 Spec. Dep. City of N.Y.
8-4 Misc. Spec Dep.
9 Required Sec'ts.

93 ACCRUED LIABILITIES
0-1 Coupon int. accr'd
0-2 R.E. Mtge " "
1-1 Loan " "
1-2 Miscel " "
1-3 Int on taxes in dispute
2 Taxes accrued
3 Rents
4 Sub. rental
5 Wages "
6 Water "
7-1 Purch. Current Acc'd Steam
7-2 " "
8 Miscel. Exp. Accr'd
9 Fed Inc Tax Deduct.

04 PROMOTION & ADVERTISING
1 Adv. labor
2 Bulletins, Circ. Adv.
3 Canvassers

14 UNDISTRIBUTED ADJUSTMENTS
(Stock scrapped)

24 ELECTRICAL LABOR
1 System operators
2 Furnace regulators
3 Regulator
4 Asst.

34 REPAIRS - ENGINES
1 Reciprocating
2 Turbines

44 GEN'L & OFFICE EXP.
1 Superintendence
2 Maps + records

54 MUNICIPAL ST. INCAN
(Multiple series larger)
1 Installation (New)

64 ENGINES & TURBINES
1 Engines
2 Turbines

74 MUNICIPAL ST. LIGHTING SYSTM

84 PREPAID ACCTS
1 Insurance
2 Rents
3 Sub. Rentals

94 SUSPENSE ACCTS
0-1 Service system Susp. Nos.
0-2 Serv. ext.

4 Hall Boys 5 Janitors 6 7 Mail Clks (Filing etc) 8 Exec. Sec'y's Clks. 9 Employment Bureau		4 First class oilers 5 Second " " 6 Pump " 7 Oil handlers 8 Wipers	piping & tanks, exhaust piping, ash pit drains, oil drains from eng. Air piping	2 Supplies & Expenses 3 Renewals 4 Repairs to accessories	2 Instlll. and remove. Tungsten fixtures 3 R & R. "108" signs		5 Meters loaned or rented	4 Bond interest 5 Ins Part. fund 7 Free Invest 8-1 Coupon Spec'l Dep. 8-3 Spec. Dep. City of N.Y. 8-4 Misc. Spec. Dep. 9- Resequired Acct's	1-3 Int on taxes in dispute 2 Taxes accrued 3 Rents " 4 Sub rental " 5 Wages " 6 Water " 7-1 Purch Current Acct'd Steam 8 Miscel Exp. Acc'd 9 Fed Inc Tax Deduct
04 PROMOTION & ADVERTISING 1 Adv. labor 2 Bulletins, Circ. Adv. 3 Canvassers 4 Management 5 Free Wiring 6 Signs, Devices 7 Demonstrations 8 Office Expenses	**14 UNDISTRIBUTED ADJUSTMENTS** (Stock scrapped)	**24 ELECTRICAL LABOR** 1 System operators 2 Foremen regulators 3 Regulator " 4 Asst " 5 Switchboard men 6 Brushmen 7 Asst " 8 Wipers 9 Wiremen	**34 REPAIRS - ENGINES** 1 Reciprocating 2 Turbines	**44 GEN'L & OFFICE EXP.** 1 Superintendence 2 Maps & records 3 Office Expense 4 Tools, etc	**54 MUNICIPAL ST. INCAN** (Multiple 600 & larger) 1. Installation (lamps) 2 Maintenance 3 Repairs	**64 ENGINES & TURBINES** 1 Engines 2 Turbines 3 Condensers, Air & Circulating Pumps.	**74 MUNICIPAL ST. LIGHTING SYSTEM** 1 2 Posts.	**84 PREPAID ACCTS** 1 Insurance 2 Rents 3 Sub. Rentals 4 Taxes 5 Wages	**94 SUSPENSE ACCTS** 0-1 Service of Gen. Supp. Mat. 0-2 Serv. est. Bronx
05 STATIONERY, POSTAGE, ETC. 1 Stationery & Printing 2 3 Postage (Other than customers) 4 Telephone & Telegrams	**15 INSPECTION DEPT** 1 Special Service 2 3 Records - Statistics 4 Corres - Clerical 5 Bill Questions 6 Postage 7 8 9 Porters.	**25 WATER FOR STEAM** Feed water, condenser water, boiler water	**35 REPAIRS MECH APPARATUS** 1 Boiler app, Coal & ash-handling systems, blowers & engines, stoker engines, Feed water heater and pumps water meters, Filters 2 Other steam eng. eqpt Condensers and Cooling Towers	**45 SUBWAY RENT** 1 Empire 2 C.T. & E.S Co. 3 Brooklyn B.R. 4 Miscellaneous	**55 MUNICIPAL STREET INCAN.** (Series 400-600 C.P.) 1 Installation (lamps) 2 Maintenance 3 Repairs	**65 MECHANICAL APPARATUS** 1 Coal and ash-hand. equip. appar with boilers & piping 2 3 Cranes & Miscel. Appar.	**75 WORK IN PROGRESS**	**85 SUSPENSE ACCOUNTS** 0 Unamort. Debt, disc & Exp. 1 3 Terreram Suspense 2-1 Gen. Truck Susp Ac 2-2 " " Bldg 3 Automobile Susp. 4 Shadyside 5 Engineering 6 Advertising 7 8 Wiring Suspense	**95 OPERATING REVENUE** 0-1 Sale of Curr. to Mer. 0-2 Sale of Current Brons 1 2 3 4 Rent of Elec. Appli. 5 Elec Mdse & Jobbances 6 7 Joint Electric 8 Misc. Elec. Rev.
06 INSURANCE	**16**	**26 FUEL FOR STEAM** Coal delivered in bunkers and disp. of ashes.	**36 REPAIRS, ELEC. GEN'TRS**	**46 MAINTENANCE & REPAIRS** 1 Poles and fixtures 2 Underg'd. Cond's 3 Over'h'd " 4 Underground Conductors C.T. & E.S Co	**56 MUNICIPAL ST. INCAND.** Multiple 200 W. & Smaller: 1. Installation (Lamps) 2 Maintenance 3 REPAIRS.	**66 GENERATORS**	**76**	**86 SUSPENSE ACCT** 0 Emp. City Sub. Co. 1 Incan Lamp Supply. 2 Cash Advance 3 Repl. & Withdrawal 6 Transmission line 7 Monthly Sal. 8 R.R. Feeder 9 Miscel Suspense.	**96 NON-OPERTG REVENUE** 1. Miscel Rent Rev. 2. Interest Rev. 3 Dividend " 4 5 Sale of Steam.
07 LEGAL, ETC 1 Legal Retainer 2 " Disburs (Gen'l) 3-1 Employees Donation & Relief 2 Savings & Loan 3 Ins - Employ-Assn 4 Sick Benefit 4 Educational 5 Service Annuity 6 Injuries to Employ 7 Other Inj'rs + Damages	**17 ENGINEERING** 1 Labor 2 Expense 3 4 Tests 5 Cadet Corps	**27 LUBRICANTS** All lubricants for station machines.	**37 REPAIRS, ACCESSORY ELEC. EQPT.** 1 Switchboard Switches 2 Cables cable racks insulators, etc.	**47 REPAIRS OF SERVICE & TRANS.** 1 Service Conn. 2 " wiring 3 Transformers (Maint. Oil etc.)	**57 MUNICIPAL STREET INCAN.** (Ser. 250 C.P. & Smaller) 1. Installation (lamps) 2 Maintenance 3 Repairs 9 Chang. Location	**67 ELECTRICAL APPARATUS** 1 Gen'l Stat. Swbds Cables 2 Transmission Step-up 3 4 RR Feeders & App. 5 Rot. & Motor Gen. 6 Boosters 7 Batteries 8 Sub. Sta. Swbd's & Cables	**77 SUBWAY CONSTRUCTION**	**87 NON-OPERATING EXPENSES** 0 Rent Expense 1 2 3 4 Cost of purchased steam. 5 Non-operating taxes.	**97 APPROPRIATION ACCTS.** Other Adds to Surplus.
08 TAXES	**18 TEST ROOM** 1 Labor 2 New Instruments. 3 Repairs to Inst. 4 Sundries 5 Expert Advice & Tests Check Meter Stand. 6 Break Down Tests & Experimental 7 Apparatus for Special Tests.	**28 PRODUCTION SUPPLIES** Packing Waste Boiler Gaskets Dynamo & Motor Brushes Gauge Glasses Fire Room Tools Small Tools	**38 REPAIRS - BUILDINGS** Elevators Ventil. Apparatus Plumbing Heating Fire Lines & Pumps Wiring	**48 SETTING AND REMOVING METER & TRANS.** 1 Meter New Install 2 " changing 3 " location 4 " testing 5 " prepaymts. 6 7 8 Transformers 9 Connect and disconnect Cust.	**58**	**68 LAND AND BUILDINGS** 1 Land 2 Structures (incl. plumbing, fire lines & pumps, wiring for light and power, elevators and fixtures, permanently attached.	**78 STREET CONDUCTORS** 1 Ed Tube System & Cable in Emp. Co Duct 2 3 4 RR feeders owned by RR 5 " " " Ed 6 Distrib Cables in ducts 7 Trans " " " 8 Poles and fixtures 9 Overhead Conductors	**88 INCOME DEDUCTIONS** 0-1 Interest on bonds 0-2 " on certfcs 1-1 " " loans 1-2 " " Cons depsit 1-3 " " taxes in dis. 1-4 " " Miscl. 2 Lease of other plants 3-3 Misc rent deduct. 4 Joint facility rent. 7 Amor. of Debt Dis. Exp 8 " Prem on debt 9 Approp. To Employees	**98 STOCK ACCOUNTS** 0 Common Stock 1 " Edison Elec Ill. Co of N.Y.
09 FURNITURE & FIXTURES	**19 REPAIRS TO GEN. STRUCT**	**29**	**39 REPAIRS, TOOLS & IMPLEMT**	**49 METER EXP'SE** 1. Operation (Maint) 2 " " Labor 3 " " (Sundries Eqpt. 4 Store Rooms 5 Renewals 6 Repairs 7 Max. Demand Devices.	**59**	**69**	**79 HOUSE INSTALN** 1. Auto Chging Recep. 2 Service Wiring 3 4 5 6 Service Connections 7 Series Inc. Lamp.	**89 APPROPRIATION ACCOUNTS** 1 Div. on Outstanding Stock 2 3 4 5 Exp. Unprovided for elsewhere 7 Other Deduct from Surplus. Res'd for Contingencies	**99 RESERVE ACCOUNTS** 2-1 Contgcy Reserve 2-2 Unamort Prem on 2-3 Insurance debt 3-2 " Participation 3-3 Uncollectible bills 3-8 Stockholders Ed E. Ill. Co of N.Y. 3-9 Wholesale Rebate 5- Renewal & Replacement

UTL AT DOWNSVIEW
D RANGE BAY SHLF POS ITEM C
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